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Notice of Allowability

Application No.

10/612,070

Examiner

Manish S. Shah

Applicant(s)

KREMERS ET AL.

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 07/03/2003.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 03 July 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>07/03/03</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

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DETAILED ACTION

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

1. The primary reason for allowance of claims 1-5 is that applicant's claimed invention includes a method of printing a receiving material with hot melt ink including the intermediate element having a surface containing an elastomer with surface tension in which the polar part thereof is 20 mN/m or less; and the elastomer has a hardness less than 80 Shore A, a thermal conductivity coefficient greater than 0.15 W/mK, an ink absorption of less than 10%, and a $\tan\delta$ of less than 0.3. It is this limitation, expressed in the claimed combination not found, taught or suggested in the prior art, that makes these claims allowable over the prior art.
2. The primary reason for allowance of claims 6-7 is that applicant's claimed invention includes an inkjet printer for printing a receiving material with hot melt ink including the intermediate element having a surface containing an elastomer with surface tension in which the polar part thereof is 20 mN/m or less; and the elastomer has a hardness less than 80 Shore A, a thermal conductivity coefficient greater than 0.15 W/mK, an ink absorption of less than 10%, and a $\tan\delta$ of less than 0.3. It is this limitation, expressed in the claimed combination not found, taught or suggested in the prior art, that makes these claims allowable over the prior art.

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3. The primary reason for allowance of claim 8 is that applicant's claimed invention includes a method of selecting an elastomer suitable for use in a printing method, wherein the elastomer is selected if the polar part of the surface tension is less than or equal to 20 mN/m; the hardness is less than 80 Shore A, a thermal conductivity coefficient greater than 0.15 W/mK, an ink absorption of less than 10%, and a $\tan\delta$ of less than 0.3. It is this limitation, expressed in the claimed combination not found, taught or suggested in the prior art, that makes these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Pertinent Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) Pan et al. (# US 6843559) discloses an offset printing apparatus having an intermediate element (element: 2, 3; figure: 1), ejecting phase change ink on to the intermediate element (element: 7, figure: 1); and transfer the ink from intermediate element to the image receiving material (figure: 1), wherein intermediate element has an outer layer, which includes a silicone elastomer and a mica-type layered silicate

material (column: 8, line: 25-35), and hardness of the mica-type silicate material is from 10 to 70 Shore A (column: 12, line: 60-65).

(2) Yamamoto et al. (# US 6386697) discloses image-forming device including intermediate medium having a silicon oil layer (figure: 2; column: 4, line: 45-60).

(3) Burr et al. (# EP 0938975 A2) discloses an apparatus and method of offset printing in an inkjet printer (element: 10, figure: 1), the method including the steps of forming an ink image on a preliminary receiving surface using phase change ink, and transfer the image from preliminary surface to final substrate (see Abstract).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Manish S. Shah
Primary Examiner
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1/26/05